

Voltage Controlled Oscillator

Low Noise Bipolar Transistor

Model TOM9340

3200 to 4000 MHz

Features

- Low Noise Bipolar Transistor
- Broad Tuning Range
- Operating Case Temp. -55 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -40°C to +85 °C
Frequency	3200 - 4000 MHz	3200 - 4000 MHz
Output Power (dBm)	+10.0	+ 8.0 Min.
Power Flatness (dBm)	±0.75	±1.5 Max.
Tuning Voltage Range (V)	1.0 to 11.0	0.0 to 12.0
Tuning Voltage Sensitivity (MHz/V)	100.0	80.0 Min.
Harmonics (dBc)	-15.0	-10.0 Max.
Spurious (dBc)	< -80	< -60
3dB Modulation BW, Zg = 50 Ohms	-----	25MHz Max.
Pushing (MHz/V)	3.0	8.0 Max.
Pulling (MHz); 14 dB RL	7.0	12.0 Max.
Frequency Drift (MHz/°C)	0.10	0.15 Max.
Power Vdc	+12	+12
mA	27.0	30.0 Max.

Maximum Ratings

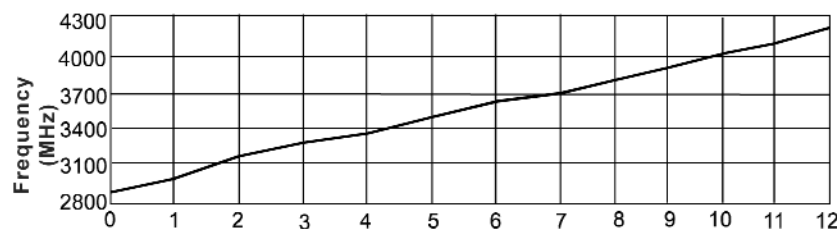
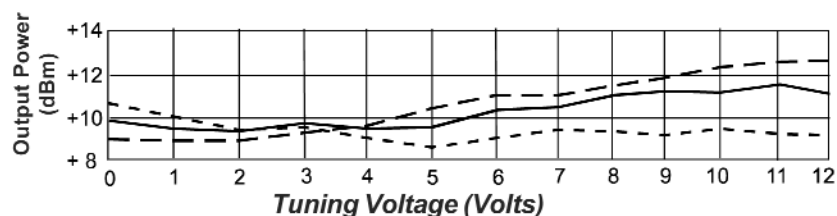
Ambient Operating Temperature -55°C to + 85 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 20 Volts
 Maximum DC Tuning Voltage + 20 Volts
 Minimum DC Tuning Voltage 0 Volts

Packaging Options (see Appendix)

TOM9340, 4 Pin TO-8 (T4)
 TON9340, 4 Pin Surface Mount (SM3)
 BXO9340, Connectorized Housing (H1)

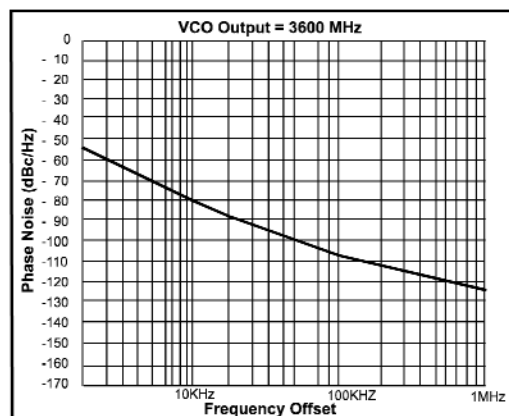
Note: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data



Tuning Voltage (Volts)

Legend ——— + 25 °C - - - - +50 °C 0 °C



Notes:

- 1- Phase Noise is measured using the Aeroflex PN9000.
- 2- Worst case phase noise @ 100KHz offset across frequency range and temperature extremes is -95 dBc/Hz